

ART. VII.—*Notes on Australian Termites (Isoptera).
Descriptions of new species.*

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(With Plate XIV.)

[Read 13th September, 1928; issued separately 30th January, 1929.]

In this paper the following termites are described as new, namely, two species of *Hamitermes* from Western Australia, and one species of *Mirotermes* from each N.W. Australia, N. Queensland and Victoria. The hitherto undescribed alate form of *Eutermes marecbensis* from N. Queensland is described.

The genus *Hamitermes* is widely distributed in Australia, where it is represented by 16 described and numerous undescribed species. Included in the latter are several very striking examples of the sub-genus *Drepanotermes*, which it is considered are best held over until the alate forms have been discovered.

The genus *Mirotermes* is represented by 18 previously described species, which are listed in a recent paper (Hill, 1927). It is of interest to note that one of the species described in the following pages is the first of the genus to be recorded from Victoria.

Eutermes, the third genus referred to in this paper, is represented in Australia by 32 described and probably as many undescribed species, many of which are so closely similar in the soldier caste that the group can be satisfactorily dealt with only in a review of the whole of the available material. The inclusion here of a description of an undescribed caste of a hitherto incompletely known form, however, appears to be justified in view of the fact that the remainder of the writer's collection contains only completely described or wholly undescribed species.

HAMITERMES WESTRALIENSIS, n. sp.

(Plate XIV., Figs. 1, 2.)

Imago.

Colour.—Head very dark brown, slightly darker than pronotum; postclypeus and antennae distinctly lighter; anteclypeus hyaline; legs, labrum and palpi yellow-ochre to ochraceous-tawny; pleurites and sternites mostly yellow-ochre, the former suffused with brown, the latter brown around spiracles; meso- and meta-thorax and tergites somewhat paler than pronotum; wings dark brown, veins very distinct.

Head.—Hemispherical behind the eyes, depressed angularly in front of fontanelle, a little wider than pronotum, very setaceous, the setae long and short, as on pronotum. Eyes small, prominent (0.192 diam.) surrounded by a pale ring. Ocelli oval (0.096 × 0.144) widely separated (0.128) from eyes. Antennae 16-jointed; 1st joint more than twice as long as 2nd and markedly wider; 2nd a little longer than wide; 3rd very short and closely fused with 4th, which is scarcely longer; 5th about as long as 3rd and 4th together, longer than 6th. Postclypeus markedly setaceous like labrum, with brown median suture, truncate in front, markedly convex behind, strongly arched above, 0.48 long × 0.65 wide. Fontanelle large, about as large as ocelli, oval, with linear extension anteriorly, anterior margin of ovate portion on line with posterior margin of eyes. Anteclypeus hyaline, nearly straight on sides, strongly produced in front.

Thorax.—Pronotum large, nearly straight in front, antero-lateral corners somewhat rounded, sides sloping rather sharply to the slightly sinuate hind margin. Meso- and metanotum narrowed sharply to the deeply notched posterior margin.

Wings (Pl. XIV., Fig. 1).—Large, dark coloured, with distinctly darker veins, the latter distinct to their extremities, the proximal half of the two anteriormost veins markedly setaceous; microtrichia moderately numerous.

Legs.—Moderately long and setaceous.

Abdomen.—Markedly setaceous; cerci with large basal segment, as long as apical segment.

Measurements.

	mm.
Length, with wings - - - -	14.25 — 14.50
Length, without wings - - -	7.50 — 8.00
Head, from base to apex of labrum, long -	1.60 — 1.67
Head, from base to clypeofrontal suture, long	0.74 — 0.80
Head, at and including eyes, wide - - -	1.30
Antennae, long - - - - -	2.04
Pronotum, long, 0.68; wide - - - -	1.24
Wings, forewings, long, 12.50; wide - -	3.28
Wings, hindwings, long, 12.00; wide -	3.40
Tibia iii, long - - - - -	1.36

Soldier.

Colour.—Head yellow-ochre; thorax, mouth parts (excepting mandibles) and legs light buff; mandibles yellow-ochre at base, shading to dark chestnut towards apex; labrum and clypeus yellow-ochre, margined anteriorly with hyaline, a dark chestnut spot at articulation of mandibles.

Head (Pl. XIV., Fig 2).—Long and very little widened on sides, wide and only slightly rounded behind, strongly arched above; clothed very scantily with reddish setae, these most numerous on the frons. Mandibles relatively short, little more than

half as long as head capsule, stout, strongly curved in at the tips, each with a short tooth a little nearer base than apex. Labrum moderately large, conical, with several stout reddish setae, a little more than half as long as mandibles. Clypeus shorter than labrum, anterior margin strongly bilobed and broadly margined with hyaline. Antennae 15-jointed; 3rd joint very short, much shorter than 1st and 2nd; 4th longer than 5th, about equal to 2nd; gula about one-fourth as wide as head.

Thorax.—Pronotum short and wide, with few long reddish setae, mostly near margins, anterior half narrowed and bent up, with slight emargination, anterolateral angles markedly produced, sides narrowed sharply to obscurely sinuate posterior margin; mesonotum narrower than pronotum, with wide but not deep emargination, fringed with reddish setae; metanotum wider than mesonotum, similarly fringed, posterior margin not so strongly emarginate.

Legs.—Moderately long and slender, with very scanty setae.

Abdomen.—With scanty reddish setae.

Measurements.

	mm.
Total length - - - - -	5.50 — 6.00
Head, to apex of mandibles, long - - -	2.35 — 2.41
Head, to apex of labrum, long - - -	2.04
Head, to labral suture - - - - -	1.62
Head, wide - - - - -	1.36 — 1.42
Head, greatest depth, including gula -	1.17
Gula, long - - - - -	0.32
Pronotum, long 0.50; wide - - - - -	0.93
Tibia iii, long - - - - -	1.24

Worker.

Colour.—Warm buff, frons whitish, antennae a little darker than head, mandibles chestnut.

Head.—Posteriorly from the insertion of the antennae hemispherical, with very few setae; postclypeus about one-third wider than long, strongly arched above, anterior margin truncate, posterior margin markedly convex, with scattered reddish setae, a dark ferruginous spot at each end; antennae 16-jointed.

Thorax.—Pronotum as in soldier.

Measurements.

	mm.
Total length - - - - -	4.50 — 4.90
Head, to apex of labrum, long - - -	1.55
Head, to clypeofrontal suture, long -	1.05
Head, wide - - - - -	1.30
Pronotum, long 0.43; wide - - - - -	0.86

Locality.—Western Australia; Darlot (Charles Biddle, 6.12.27).

Types (imago, soldier, worker) in the author's collection.

HAMITERMES (DREPANOTERMES) TAMMINENSIS, n. sp.

(Plate XIV., Figs. 3-6.)

Imago.

Colour.—Head, pronotum and principal veins of wings dark brown; antennae and legs light yellowish-brown; pleural sclerites and tergites brown, lighter than head; sternites yellowish, suffused with dark brown at spiracles; postclypeus yellowish-brown suffused with dark brown on sides.

Head (Pl. XIV., Fig. 3).—Clothed with many small setae, widest in front, narrowed slightly posteriorly. Eyes very small and prominent. Ocelli widely separated from eyes. Frontal lobe very large, broadly oval. Antennae with 16-17 segments (generally 17); 1st long and stout, cylindrical; 2nd less than half as long and much narrower than 1st, cylindrical; 3rd and 4th very small, closely fused; 5th globose.

Thorax.—Pronotum clothed similarly to head, slightly narrower than head, anterior margin nearly straight, anterolateral angles broadly rounded, the posterior margin broadly rounded with obscure indentation in middle; posterior margin of meso- and metanotum widely notched.

Wings (Pl. XIV., Figs. 4, 5).—Large, all veins very distinct; the two anteriormost veins very setaceous.

Legs.—Long and slender, with numerous small setae.

Abdomen.—Moderately setaceous; setae small.

Measurements.

	mm.
Total length - - - - -	19·00 — 20·00
Length, without wings - - - - -	9·00
Head, to apex of labrum, long - - - - -	1·98
Head, to clypeofrontal suture, long - - - - -	1·05
Head, wide - - - - -	1·60
Antennae, long - - - - -	2·54
Eyes, diam. - - - - -	0·240 × 0·288
Eyes, from ocelli - - - - -	0·160
Eyes, from lower margin of head - - - - -	0·144
Ocelli, longest diam. - - - - -	0·160
Pronotum, long 0·93; wide - - - - -	1·48 — 1·55
Wings, forewings, long 16·00; wide - - - - -	4·27
Wings, hindwings, long 15·00; wide - - - - -	4·52
Tibia iii, long - - - - -	1·86

Soldier.

Colour.—Head, antennae and pronotum dark orange-yellow; legs, tergites of abdomen light clay colour; anterior margin of anteclypeus whitish; labrum lemon-yellow; mandibles mahogany-red.

Head (Pl. XIV., Fig. 6).—Elongate oval, with very few setae; frons rugose; postclypeus strongly bilobed, divided medially by a deep groove; mandibles long and slender, with broad tooth on each about the middle, tooth on left jaw larger than that

on right; gula long and narrow, rather more than one-fourth wider in middle than head. Antennae with 16 (very rarely 17) segments; 1st segment long, moderately wide, twice as long as 2nd, slightly widened towards the apex; 2nd much narrower than 1st, nearly cylindrical; 3rd a little shorter than 2nd, narrow at base but as wide as 2nd at apex; 4th shortest of all; 5th as long as 3rd; 6th-11th lengthening progressively.

Thorax.—Pronotum small, with very few setae, these stout and confined to near the margin except on anterior one-third which bears scattered setae; the anterior one-third narrowed and sharply bent up and rounded on anterior margin; posterior margin rounded, very slightly sinuate in middle. Mesonotum about as wide as pronotum, with sinuate posterior margin and setae as on pronotum; metanotum markedly wider, but not longer, than mesonotum; posterior margin and setae as in the latter.

Legs.—Long and slender, with scanty setae; claws and spines small and slender.

Abdomen.—Short and wide, narrowed abruptly to bluntly pointed apex, with rather scanty, long setae; cerci large, the basal segment large, nearly as long as the apical segment, which is slender.

Measurements.

	mm.
Total length - - - - -	5·90
Head, to apex of mandibles, long - -	2·66 — 2·72
Head, to external articulation of mandibles, long - - - - -	1·67 — 1·79
Head, wide - - - - -	1·36 — 1·42
Gula, at narrowest part, 0·031; long - -	0·062
Antennae, long - - - - -	3·28
Pronotum, long 0·62; wide - - - - -	0·93 — 0·99
Tibia iii, long - - - - -	1·86 — 1·92

Worker.

Colour.—Head, upper surface as in soldier, sides and frons shading to light straw; postclypeus suffused with orange-yellow laterally.

Head.—With very few pale setae, widest in front, narrowed posterior margin; postclypeus about half as long as wide, nearly truncate in front, broadly rounded behind. Antennae with 17 segments; 3rd segment shortest.

Measurements.

	mm.
Total length - - - - -	5·80 — 6·20
Head, to apex of labrum, long - - - - -	1·86
Head, to clypeofrontal suture, long - -	1·17 — 1·24
Head, to external articulation of mandibles, long - - - - -	1·42
Head, wide - - - - -	1·61 — 1·67
Antennae, long - - - - -	2·91
Pronotum, long 0·62 — 0·68; wide - - - - -	0·93 — 1·00
Tibia iii, long - - - - -	1·79

Localities.—Western Australia: Tanmin (type locality) all castes, Eradu, soldiers and workers, Merredin, soldiers (J. Clark). Geraldton, queen, soldiers and workers (Edwin Ashby, in January).

Allied Species.—This species is most closely allied to *Hami-termes* (*Drepanotermes*) *silvestrii* Hill from Townsville, N.Q., (*Bull. Ent. Res.*, xii. (4), p. 364, 1922), from which the imago is distinguished, *inter alia*, by its much smaller size, darker (less reddish) wings, and fewer antennal segments, and the soldier by its oval, smaller and lighter coloured head and fewer antennal segments.

Types (imago, soldier and worker) in the author's collection.

EUTERMES MAREEBENSIS Hill.

Proc. Linn. Soc. N.S.W., xlvii. (2), 1922.

(Plate XIV., Figs. 7, 8.)

Imago.

Colour.—Head and thorax mummy-brown; tergites of abdomen very little paler; clypeus buckthorn-brown, mandibles (excepting teeth), antennae and trophi a little paler; coxae, trochan-

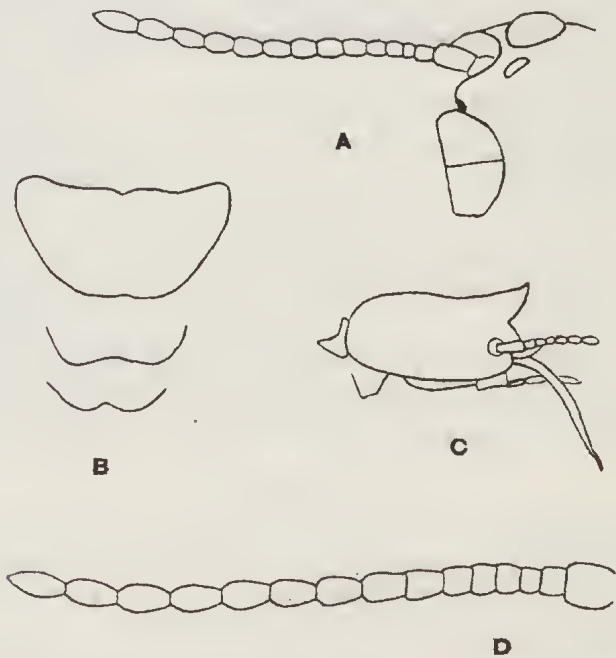


FIG. 1.—*Eutermes mareebensis*, Hill, imago, a, head, b, thorax.
Mirotermes argutus, n.sp., c, soldier, head.
Mirotermes insitivus, n.sp., d, imago, antennae.

ters, femora and tibiae somewhat lighter than tergites; tarsi whitish, sternites paler than legs, the first four mostly pale yellowish-brown suffused with darker colour laterally; wings smoky, with principal veins same colour as tergites.

Head (Text-fig. 1a).—Moderately setaceous, widest in front, almost hemispherical behind the eyes when viewed from above, frontal and transverse sutures distinct. Fontanelle large, linear, nearly as long as eyes are wide, the anterior end slightly widened. Eyes small (0.170×0.170) prominent, about as far from lower margin of head as they are from ocelli. Ocelli large (0.085 long), oval, oblique. Postclypeus large, distinctly lighter than head with a fairly distinct brownish median suture, twice as wide as long, the anterior margin truncate, with a scanty fringe of setae, these mostly longer than the few on the remainder of the postclypeus, posterior margin hemispherical; anteclypeus large, whitish, produced in the middle. Antennae 14-jointed; 1st joint large, cylindrical; 2nd a little more than half as long as 1st and a little narrower; 3rd markedly shorter and narrower than 2nd smallest of all; 4th-13th progressively longer and wider, the 13th nearly as long as 1st; 14th as long as 1st, narrower than 13th, widest at proximal third.

Thorax (Text-fig. 1b).—Pronotum moderately setaceous, a little narrower than head, slightly arcuate in front, anterolateral corners, narrow sides sloping sharply to the narrow and slightly sinuate posterior margin; posterior margin of meso- and metanotum more sinuate than in pronotum.

Wings (Pl. XIV., Figs. 7, 8).—Slender, the radial sector and first six or seven branches of the cubitus very distinct, the former and the margin very setaceous. Membrane with rather numerous microtrichia, and densely covered with star-like micrasters. The media passing through the wing a little above the middle, and joining the margin a little above the apex, generally with one branch about the distal fifth to the hind margin; the cubitus with about eleven branches, the first two or three very short, the others not so well-defined, but easily discernible to their extremity, mostly unbranched.

Legs.—Dark coloured, short and comparatively stout; the femora with scanty setae; tibiae with markedly stronger and more numerous setae; tibiae, spurs and claws long and slender.

Abdomen.—

Measurements.

	mm.
Length, with wings ♂ 7.50 — 8.00; ♀ -	8.00 — 8.50
Length, without wings ♂ 4.10 — 4.44; ♀ -	4.67 — 4.90
Head, to apex of labrum, long -	0.91
Head, to clypeofrontal suture, long -	0.46
Head, at and including eyes, wide -	0.69
Antennae, long -	1.10
Pronotum, long 0.34; wide -	0.60
Forewing, long 6.00 wide -	1.52
Tibia iii, long -	0.62 — 0.68

Locality.—North Queensland; Meringa (F. H. Taylor, Nov., 1924).

The identity of the above has been established by comparison of associated soldiers and workers with the types of these castes (from Mareeba, Cairns hinterland, N.Q.).

Types (imago, soldier and worker) in National Museum, Melbourne.

MIROTERMES ARGUTUS, n. sp.

Soldier.

Colour.—Head, antennae and palpi light orange-yellow, thorax and legs stramineus.

Head (Text-fig. 1c).—Long and narrow, parallel on sides, with scanty long setae; frontal process large, stout at base, rather bluntly pointed, the extreme tip bent upwards. Antennae 14-jointed, slender; 1st joint large, more than twice as long as 2nd and one-third wider, slightly swollen at apex; 2nd longer than wide, parallel on the sides; 3rd and 4th smallest, 4th a little smaller than 3rd; 5th-9th increasing in length progressively; 10th-14th subequal, long and narrow (about as long as 8th). Labrum narrow, parallel on the sides, truncate in front with the anterolateral corners produced into points. Mandibles very long and slender. Gula long and narrow, about one-fourth as wide as head.

Thorax.—Pronotum small, much narrower than head, saddle-shaped, anterior margin convex in the middle, the anterolateral corners narrowed, sides and posterior margin together nearly hemispherical, with scanty long setae.

Measurements.

	mm.
Total length	4.25
Head, to apex of frontal process, long	1.42
Head, deep	0.62 — 0.74
Head, wide	0.86
Gula, at narrowest part, wide	0.228
Antennae, long	1.70
Mandibles, long	1.14
Pronotum, long 0.27 — 0.28; wide	0.56 — 0.57
Tibia iii, long	0.62

Worker.

Colour.—Head light orange-yellow, frons whitish, antennae, thorax and legs pale stramineus.

Head.—Glabrous, almost spherical as seen from above, widest at antennae, with scanty setae. Clypeus large, strongly convex, with obscure median suture, a pale ferruginous mark at articulation of mandibles, with a few setae; anteclypeus large, nearly as long as postclypeus. Labrum small, markedly convex, with few setae. Antennae 14-jointed; 3rd and 4th joints smallest, closely

fused, 5th shorter than 2nd, globular; 6th-14th increasing in length progressively; 14th noticeably longer than 13th, narrowed from the proximal fourth to the pointed apex.

Thorax.—Pronotum, as in soldier.

Measurements.

	mm.
Total length - - - - -	3·50
Head, to apex of labrum, long - - -	0·85
Head, to clypeofrontal suture, long - - -	0·60
Head, wide - - - - -	0·74 — 0·80
Pronotum, long 0·22; wide - - - - -	0·45
Tibia iii, long - - - - -	0·60

Locality.—Victoria, Kewell.

Described from a soldier and three workers; found under a log (February).

Allied Species.—The soldier differs from the typical form of *Mirotermes kraepelini* Silv. in having a shorter and narrower head, more angular frontal process, and much more slender mandibles. From variety "A" of the last named species (Hill, *Mem. Nat. Mus., Melb.*, No. 7, 1927, p. 95) it differs in having a more angular and straighter frontal process, longer, shallower and deeper coloured head and different labrum; from variety "C" it differs in its smaller and narrower head, more slender mandibles, narrower and otherwise different labrum; from variety "E" it differs in having a shorter and narrower head, more slender mandibles, narrower labrum and more slender frontal process.

Types (soldier and worker) and others in National Museum, Melbourne; collected and donated by Mr. Jas. A. Hill, of Murtoa.

MIROTERMES JARMURANUS, n. sp.

Imago.

Colour.—Head, thorax and tergites of abdomen argus-brown; legs, antennae and sternites of abdomen buckthorn-brown; clypeus ochraceous-tawny. The whole insect densely setaceous, many of the setae markedly long.

Head.—Almost hemispherical when viewed from above, the summit depressed, fontanelle obscured by setae. Eyes moderately small (0·306×0·306) and prominent. Ocelli large (0·170 long) broadly oval, a little less than their short diameter from eyes. Antennae 15-jointed, very long; 3rd joint very large, not much smaller than 1st; 2nd very small, bead-like; 4th and 5th long and narrow, shorter and narrower than 3rd; 6th longer than 4th and 5th; remaining joints very long and narrow. Mandibles each with apical tooth much larger than, and widely separated from, the next. Postclypeus small, strongly convex above, with numerous long and short setae; anteclypeus whitish, short, truncate in front. Labrum small, longer than wide, not covering apex of mandibles.

Thorax.—Pronotum very large, markedly longer than wide, strongly arched, conspicuously concave in front, sides sloping to the broadly rounded posterior margin. Posterior margin of mesosar; metanotum narrowed and deeply notched, the metanotum more so than mesonotum.

Wings.—Wing stumps small, those of mesonotum not much larger than those of metanotum.

Legs.—Moderately short and stout; very setaceous.

Measurements.

	mm.
Length, without wings	6.15
Head, to apex of labrum, long	0.96
Head, to clypeofrontal suture, long	0.74
Head, at and including eyes, wide	1.19
Head, deep	0.51
Antennae, long	2.28
Pronotum, long 0.85: wide	1.19
Tibia iii, long	1.19

Locality.—North-West Australia: 130 miles south-east of Broome (July or Aug., 1924).

Described from a dealated female, collected and presented to the National Museum, Melbourne, by A. S. Cudmore.

It is possible that the specimen described above is the macrop-terous form of *M. broomensis* Mjüb., only the soldiers and workers of which have been described.

MIROTERMES INSITIVUS, n. sp.

(Plate XIV., Figs. 9-11.)

Imago.

Colour.—Head very dark brown, postclypeus very little lighter than head, anteclypeus whitish; labrum suffused with yellow; antennae, mouth parts and legs, light brown; pronotum nearly as dark as head; wings dark smoky.

Head (Plate XIV., Fig. 9).—Small, rounded when viewed from above, rather densely clothed with short and long setae. Eyes rather large (0.289×0.289), prominent, close (0.04) to lower margin of head, closer than to ocelli. Ocelli large (0.136), broadly oval, separated from the eyes by a space equal to their short diameter. Postclypeus moderately large, about twice as wide as long, strongly convex, hemispherical behind, truncate in front, with rather distinct median suture and clothed moderately densely with small setae; anteclypeus less than half as long as postclypeus, nearly truncate in front. Labrum small, a little widened in the middle, moderately convex, densely setaceous, broadly rounded in front. Fontanelle small, oval, laying within a small depressed area and in line with the middle of the eyes (in all cleared preparations there is to be seen a dark-coloured, broadly oval posterior extension of the fontanelle).

Antennae (Text-fig. 1d).—15-jointed; 1st joint short and wide, two-thirds as wide as long, as long as 14th; 2nd short and wide, as wide as long; 3rd very short, but nearly as wide as 2nd; 4th and 6th about equal to 2nd; 5th wide, but a little shorter than 4th and 6th; 8th to 13th about equal, a little longer than 7th, the latter wider at base than the following joints; 14th, a little longer than 13th, but hardly as long as 15th, which is elongate-oval, and widest in the middle. Mandibles with apical tooth on each side much larger than the next; dentition as shown in (Pl. XIV., Fig. 9).

Thorax.—Pronotum very large, as wide as head, densely setaceous, rather strongly arched, the anterior margin broadly concave, anterolateral angles rounded, sides sloping sharply to the narrow posterior border, the latter sometimes almost truncate, but generally markedly emarginate. Meso- and metanotum with the sides markedly narrowed posteriorly, the hind border of the former generally emarginate as in pronotum, that of the latter much more deeply and acutely notched, both sclerites markedly setaceous, though less setaceous than pronotum.

Wings (Pl. XIV., Figs. 10, 11).—Generally with hindwings a little longer and wider than forewings, rather wide relatively to length, of same colour as those of *M. kraepelini*, very setaceous along border and radial sector; the two anteriormost veins, especially the radial sector, very dark; all the veins distinct to their termination; the media passing through the upper third of the wing, with 4 or 5 branches, the first generally a little beyond the middle and sometimes branched, the main stem joining the margin near the apex of the wing; the cubitus with 8-14 branches, seven or eight nearest the base very dark and distinct. Membrane with few microtrichia, but densely covered with micrasters. Wing-stumps small, very setaceous, suture straight.

Legs.—Densely setaceous, femora a little less so than tibiae; claws and spurs long and slender.

Abdomen.—Very setaceous, the setae shorter and finer than those on head and thorax; cerci short and very wide at base.

Measurements.

	mm.
Length, with wings - - - -	11.00 — 11.50
Length, without wings - - - -	6.00 — 6.50
Head, to apex of labrum, long - - - -	1.14
Head, to clypeofrontal suture, long - - - -	0.57
Head, at and including eyes, wide - - - -	1.14
Antennae, long - - - -	1.60 — 1.70
Pronotum, long 1.60 — 1.70; wide - - - -	1.14 — 1.30
Forewings, long 9.00 — 9.50; wide - - - -	2.70
Tibia iii, long - - - -	1.14

Locality.—N. Queensland: Townsville (G.F.H., 22.12.19, 6.1.20, 15.2.21).

Biology.—The association of this species with *Eutermes vernoni* Hill is referred to in an earlier paper (Hill, *P.L.S. N.S.W.*, xlvii. (2), 1922, p. 148, 2nd line).

Type in the author's collection.

A CORRECTION.

In my paper entitled "Termites (Isoptera) from South Sea and Torres Strait Islands," *Proc. Roy. Soc. Victoria*, xxxix. (1), 11th Nov., 1926, the reference to *Calotermes (Calotermes) repandus* Hill is given as "Memoirs of the National Museum, Melbourne, No. 7, in Press." The correct references are "The Entomologist," lix., Nov., 1926, p. 297, and "Insects of Samoa," part vii., 28th May, 1927, p. 6.

It should be noted also that owing to long delay in the Press, the description of the imago of *Calotermes (Glyptotermes) xantholabrum* Hill (*Mem. Nat. Mus.*, Melbourne, No. 7, June, 1927) is antedated by the subsequently written preliminary and full descriptions of the soldier caste in "The Entomologist," and "Insects of Samoa," of the above-mentioned dates, respectively.

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EXPLANATION OF PLATE XIV.

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|---------------|--|----------------------------|
| Figs. 1, 2.— | <i>Hamitermes westraliensis</i> , n. sp. | |
| | " | 1. Imago: wings. |
| | " | 2. Soldier: head. |
| Figs. 3, 6.— | <i>Hamitermes tamminensis</i> , n. sp. | |
| | " | 3. Imago. |
| | " | 4. Imago: wing. |
| | " | 5. Imago: micrasters. |
| | " | 6. Soldier. |
| Figs. 7, 8.— | <i>Eutermes marcebensis</i> Hill. | |
| | " | 7. Imago: wing. |
| | " | 8. Imago: micrasters. |
| Figs. 9, 11.— | <i>Mirotermes insitivus</i> , n. sp. | |
| | " | 9. Imago: head and thorax. |
| | " | 10. Imago: wings. |
| | " | 11. Imago: micrasters. |